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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,285	02/20/2004	John D. Hatlestad	279.B40US1	7615
21186 7590 12/03/2007 SCHWEGMAN, LUNDBERG & WOESSNER, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			EXAMINER LAYNO, CARL HERNANDZ	
			ART UNIT 3766	PAPER NUMBER
			MAIL DATE 12/03/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/783,285

Applicant(s)

HATLESTAD, JOHN D.

Examiner

Carl H. Layno

Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10, 14, 15, 17-21, 23, 26-28, 30, 34-42, 44-49, 51-55 and 57-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 44-49 and 51-55 is/are allowed.
- 6) ☒ Claim(s) 1-10, 17-21, 23, 26-28, 30, 35, 36, 57, 58, 61, 62 and 65-68 is/are rejected.
- 7) ☒ Claim(s) 14, 15, 34, 37-42, 59, 60, 63 and 64 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Acknowledgment is made of applicant's amendment which was received by the Office on August 31, 2007.

2. Claims 5, 11, 12, 13, 16, 22, 24, 2, 29, 31, 32, 33, 43, 50, and 56 are canceled. Claims 57-68 have been added. Claims 1-4, 6-10, 14, 15, 17-21, 23, 26-28, 30, 34-42, 44-49, 51-55, and 57-68 are pending.

#### ***Claim Objections***

3. Claim 26 is objected to because of the following informalities: - As amended, claim 26 depends from canceled base claim 25. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 65 recites the limitation "the RF transmitter and receiver" in line 1. There is insufficient antecedent basis for this limitation in the claim. To overcome this rejection, the Examiner recommends changing the claim dependency to claim 64.

#### ***Claim Rejections - 35 USC § 102***

6. Upon further reconsideration of applicant's amendments to the claims, as reflected in the Examiner Interview summary of 8/31/07, the Examiner is withdrawing the 35 U.S.C 102 (b) rejection of Mann et al (US 4,082,097), which was made against claims 1-3, 10, 11, 13, 17, and 23-26 in the last Office action.

7. Upon further review of applicant's claims, as amended, however, the Examiner is making the following new grounds of rejection based upon a reinterpretation of the Kung (US 6,212,430) patent, which was cited as prior art in the last Office action, and the newly discovered Mueller et al (US 6,047,214) patent, cited herein.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-10, 17-21, 23, and 26 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kung (US 6,212,430).

In regard to claims 1, 2, 17, and 23, the Kung (US 6,212,430) patent, cited in the Office Action of 12/18/06 but not used, appears to read upon applicant's modified system. As currently claimed, applicant's system comprises a "transmission module" having the responsibility of controlling an "inductive transfer link" for inductively transmitting energy to an implantable medical device. One is left with the impression that the function of the "transmission module" pertains to transfer of power only. Kung (Fig.2) discloses a controller 120 which performs the

function of the “transmission module” by providing inductive power transfer of energy to an implantable medical device **240** via attached energizable primary coils **110**. User intervention is not necessary for initiating the power transfer of energy to the implanted device since there appears to be 1) no MMI (man machine interface) for permitting user intervention, and 2) the device of Kung uses a proximity detector **126** (Fig.1) to automatically detect the presence/relative location of an implantable device and uses this information to adjust power and current being sent to the primary coils **110**. See Fig.3.

In regard to claims 2-9, as shown in Fig.2, the patient **205** is reclining on the bed/mattress **210** containing the primary coils **110** (col.2, lines 28-30). The Examiner is taking the position that this may occur at any time including nights.

In regard to claim 10, the implanted device **215** is disclosed as an artificial heart (col.7, lines 33-34), which performs the function of a “cardiac rhythm management device”.

In regard to claims 18-21, it would be obvious, if not inherent, to assume that a patient, when lying on mattress **210** (Fig.2) would be between 1cm to 10 cm away from coils **110** since applicant also specifies placement of energizable coils **201,202** “under a patient’s mattress **104** or mattress pad” (p.8, lines 25-29). In addition, applicant’s claimed ranges would be considered as obvious since where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. MPEP 2144.05.II.A.

In regard to claim 26, energy inductively transferred is used to recharge the internal battery **220** (Fig.2) of the Kung implantable device.

10. Claims 1-3, 17, 23, 26-28, 30, 35, 36, 57, 58, 61, 62, 64, and 66-68 are rejected under 35 U.S.C. 102(b) as being anticipated by Mueller et al (US 6,047,214).

11. The Mueller et al (US 6,047,214) patent describes a system and method for powering, controlling, and communicating with multiple inductively-powered implantable medical devices. In regard to claims 1, 2, 57, 59, the system of Mueller et al discloses embodiments showing primary 3-D energizable coils (Figs.2 and 3) integrated into a harness for placement around a body (col.4, line 33-38). These 3-D coils provide directional energy to one or more implantable medical devices placed at various locations in the body (col.4, lines 38-45) (e.g. Fig.4, which shows a heart 40 with four implantable surface mounted devices 42 attached). The powering of the devices is automatic and alignment of the implanted devices with respect to the coils is not necessary since the 3-D coils automatically steer induced energy to devices located at specific areas of the body using a Magnetic Vector Steering (MVS) scheme (col.3, line 62 thru col.4, line 11). User intervention is not necessary since the various implantable devices are powered using a "standard round-robin scheduling method" in which each device is inductively powered at a scheduled time (col.6, lines 43-46 and 51-53). In addition to energy transfer, the coils are also used to send and receive command, programming, and control information (Abstract, lines 3-7). In regard to claim 3, the specification of Mueller et al does not specify times of use, hence, the Examiner is taking the position that the Mueller et al system is capable of being used at any time of day or night. In regard to claims 17, 23, and 26, applicant's attention is directed to Fig.6, which shows an implantable device 60 having a battery 66 which can be recharged by the external energizing coil (col.5, lines 5-15). In regard to claims 27, 28, 30, 35, 36, 57, 58, 61, and 62, the data link established by Mueller et al utilizes Half-Cycle Amplitude Modulation (HCAM)

utilizes Half-Cycle Amplitude Modulation (HCAM) (col.7, lines 11-16). The device of Mueller et al appears to be bidirectional – communication transmitted from the external device to the implantable device (Abstract, lines 4-6) and vice versa (col.5, lines 3-5). In regard to claims 64, 67, and 68, the Mueller et al device implanted device utilizes a 1 MHz RF carrier signal (col.7, lines 42-45). In regard to claims 66 and 68, applicant's attention is directed to Fig.8, which shows the schematic of Mueller et al's transmission module with the feature of a 1 MHz RF signal source.

***Allowable Subject Matter***

12. Claim 65 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. Claims 14, 15, 34, 37-42, 59, 60, 63, and 64 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. Claims 44-49 and 51-55 are allowed.

***Conclusion***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl H. Layno whose telephone number is (571) 272-4949. The examiner can normally be reached on M-F.

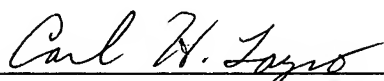
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela D. Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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CARL LAYNO  
PRIMARY EXAMINER

CHL  
11/30/2007